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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,574	12/20/2001	Yuri Iwano	1907-0205P	5010
2292 7590 11/19/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER SONG, JASMINE	
			ART UNIT 2188	PAPER NUMBER
			NOTIFICATION DATE 11/19/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/018,574

Applicant(s)

IWANO, YURI

Examiner

Jasmine Song

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. This office Action is in response to Amendment filed on 05/18/2007. All rejections and objections not explicitly repeated below are withdrawn.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Deiotte, U.S. Patent 4,791,623.

Regarding claim 1, Deiotte teaches that a disk medium managing method for managing data to be recorded on a disk medium (see claim 1 of Deiotte, it is taught as writing files of information and directory data to an optical disk) by file format and representing a hierarchical structure by directories (Fig.4), comprising:

Art Unit: 2188

pre-defining an area (it is taught as reserving directory regions 62 A, col.6, lines 9-12) on the disk medium as a directory (Fig.5) by storing on the disk medium area location information for the area (it is taught as the primary function of boot record is to identify the position or location occupied by the first directory data region such as 62A, col.8, lines 47-49 and col.6, lines 21-38), and

recording complete contents of files and directories within the area defined as the directory based on the stored area location information (Fig.5 and col.6, lines 39-55 and col.9, lines 41-65).

Regarding claim 2, Deiotte teaches further comprising hierarchically pre-defining a further directory in an area (it is taught as one of the subdirectories 84A-84C) within the area pre-defined on the disk medium as the directory.

Regarding claim 3, Deiotte teaches further comprising selectively deciding whether the area is pre-defined on the disk medium or not (col.6, lines 3-20).

Regarding claim 4, Deiotte teaches that wherein hierarchical definition of the directory for pre-defining the area on the disk medium is restricted by that the directory must be defined under a directory having a pre-defined area on the disk medium (Fig.4, subdirectories are defined under the root top directory which has a pre-defined area).

Regarding claim 5, Deiotte teaches that wherein the area pre-defined on the disk medium is continuously arranged thereon (it is taught as consecutive or adjacent sectors 52, col.6, lines 9-12 and lines 50-53).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deiotte, U.S. Patent 4,791,623, in view of Walker., U.S. Patent 6,134,586.

Regarding claims 6 and 7, Deiotte teaches the claimed invention as noted above (claim 1), Deiotte does not teach that calculating a maximal time of seeking data in the areas pre-defined on the disk medium and specifying a maximal allowable time of seeking data in an area to be pre-defined on the disk medium and calculating an area on the disk medium satisfying the specified allowable seek time as disclosed in the Specification, page 18 to 19. However, Walker teaches that calculating a maximal time of seeking data in the areas pre-defined on the disk medium (the maximum seek time as disclosed in the col.3, lines 22-23 and col.4, lines 17-18) and specifying a maximal allowable time of seeking data in an area to be pre-defined on the disk medium (the maximum average seek time as disclosed in the col.3, lines 27-32) and calculating an

area on the disk medium satisfying the specified allowable seek time is taught as the maximum average seek time can be reduced to about half the maximum seek time (col.3, lines 30-32). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Walker in the system of Deiotte and utilize the longest seek time for seeking the data in the area on the disk and make sure the time to record the data between two different locations is less than the specified allowable seek time because it would reduce the seek time by dividing up the storage area of the disk into multiple-ring shaped zones (col.3, lines 27-32) and provide the maximum efficiency of reading or writing.

Accordingly, one of ordinary skill in the art would have recognized this and concluded that they are from the same field of endeavor. This would have motivated one of ordinary skill in the art to implement the above combination for the advantage set forth above.

Allowable Subject Matter

7. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Applicant's Arguments

8. Applicant's arguments filed 05/18/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that Deiotte does not constitute an area defined as a directory for recording complete contents of files, however, it is noticed that Deiotte teaches file management system first reserves a directory data region such as 62A of a predetermined size, i.e., a predetermined number of sectors on optical disk 30 (col.6, lines 3-20), then the file management system causes directory information to be written into directory data regions 62A-62C in a tree structure (col.8, lines 3-5 and col.9, lines 41-65).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the

art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

11. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 571-272-4213. The examiner can normally be reached on 7:30-5:30 (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/018,574

Page 8

Art Unit: 2188


Jasmine Song

Patent Examiner

November 13, 2007